



015118-6SQ.ST25.txt
SEQUENCE LISTING

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DAHIYA, MONIKA
PATHANIA, RANJANA
DIKSHIT, KANAK LATA

<120> A method for oxygen regulated production of recombinant staphylokinase

<130> U 015118-6

<140> 10/814,850
<141> 2004-03-31

<150> US 60/459,439
<151> 2003-04-01

<160> 14

<170> PatentIn version 3.3

<210> 1
<211> 161
<212> DNA
<213> Artificial Sequence

<220>
<223> A nucleotide sequence of expression cassette OXY-1

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gtggattaag ttttgagagg tcaataagat tataatatgt gatgcttcac aattctgatg 120
tatggcaaaa ccataataat gaacttaagg aagacctcat g 161

<210> 2
<211> 582
<212> DNA
<213> Artificial Sequence

<220>
<223> A modified staphylokinase SAK-2 gene

<220>
<221> CDS
<222> (16)..(408)

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<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (24)..(24)
<223> n is a, c, g, or t

<400> 2
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Ala	Gly	Ala	Tyr	Lys	Lys	Gly	Asp	Asp	Ala	Ser	Tyr					
1				5					10							
ttt	gaa	cca	aca	ggc	ccg	tat	ttg	atg	gta	aat	gtg	act	gga	gtt	gat	99
Phe	Glu	Pro	Thr	Gly	Pro	Tyr	Leu	Met	Val	Asn	Val	Thr	Gly	Val	Asp	
15				20					25							
ggt	aaa	gga	aat	gaa	ttg	cta	tcc	cct	cat	tat	gtc	gag	ttt	cct	att	147
Gly	Lys	Gly	Asn	Glu	Leu	Leu	Ser	Pro	His	Tyr	Val	Glu	Phe	Pro	Ile	
30				35					40							
aaa	cct	ggg	act	aca	ctt	aca	aaa	gaa	aaa	att	gaa	tac	tat	gtc	gaa	195
Lys	Pro	Gly	Thr	Thr	Leu	Thr	Lys	Glu	Lys	Ile	Glu	Tyr	Tyr	Val	Glu	
45				50					55					60		
tgg	gca	tta	gat	gcg	aca	gca	tat	aaa	gag	ttt	aga	gta	gtt	gaa	tta	243
Trp	Ala	Leu	Asp	Ala	Thr	Ala	Tyr	Lys	Glu	Phe	Arg	Val	Val	Glu	Leu	
65				70					75							
gat	cca	agc	gca	aag	atc	gaa	gtc	act	tat	tat	gat	aag	aat	aag	aaa	291
Asp	Pro	Ser	Ala	Lys	Ile	Glu	Val	Thr	Tyr	Tyr	Asp	Lys	Asn	Lys	Lys	
80				85					90							
aaa	gaa	gaa	acg	aag	tct	ttc	cct	ata	aca	gaa	aaa	ggt	ttt	gtt	gtc	339
Lys	Glu	Glu	Thr	Lys	Ser	Phe	Pro	Ile	Thr	Glu	Lys	Gly	Phe	Val	Val	
95				100					105							
cca	gat	tta	tca	gag	cat	att	aaa	aac	cct	gga	ttc	aac	tta	att	aca	387
Pro	Asp	Leu	Ser	Glu	His	Ile	Lys	Asn	Pro	Gly	Phe	Asn	Leu	Ile	Thr	
110				115					120							
aag	gtt	gtt	ata	gaa	aag	aaa	aaaaacaaaa	aaaa	438							
Lys	Val	Val	Ile	Glu	Lys	Lys										
125				130												
taatgtcttg	attgaatatg	tgttgtgaaa	ttatcttca	tcaaattctc	attcatgcac											498
gaatggttct	gcccccaccta	atcagatatt	acgtgactta	tggggagaaa	tcagtttggaa											558
taaaagtggaa	ggatccagta	gccg														582

<210> 3
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Gly

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			20					25			30			

Glu

Leu	Leu	Ser	Pro	His	Tyr	Val	Glu	Phe	Pro	Ile	Lys	Pro	Gly	Thr
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Thr Leu Thr Lys Glu Lys Ile Glu Tyr Tyr Val Glu Trp Ala Leu Asp
50 55 60

Ala Thr Ala Tyr Lys Glu Phe Arg Val Val Glu Leu Asp Pro Ser Ala
65 70 75 80

Lys Ile Glu Val Thr Tyr Tyr Asp Lys Asn Lys Lys Glu Glu Thr
85 90 95

Lys Ser Phe Pro Ile Thr Glu Lys Gly Phe Val Val Pro Asp Leu Ser
100 105 110

Glu His Ile Lys Asn Pro Gly Phe Asn Leu Ile Thr Lys Val Val Ile
115 120 125

Glu Lys Lys
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<210> 4
<211> 37
<212> DNA
<213> Artificial Sequence

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<223> A primer SAK-1 for amplification

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37

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37

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<223> An oligonucleotide primer SAK-3

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36

<210> 8

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<213> Staphylococcus aureus

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acaggccgt atttgcgtt aaatgtgact ggagttgtat gtaaaggaaa tgaattgcta 120

tcccctcatt atgtcgagtt tcctattaaa cctgggacta cacttacaaa agaaaaaatt 180

gaataactatg tcgaatgggc attagatgctg acagcatata aagagtttag agtagttgaa 240

ttagatccaa gcgcaaagat cgaagtcact tattatgata agaataagaa aaaagaagaa 300

acgaagtctt tccctataac agaaaaaggt tttgttgtcc cagatttatac agagcatatt 360

aaaaaccctg gattcaactt aattacaaag gttgttatag aaaagaaata a 411

<210> 9

<211> 606

<212> DNA

<213> Artificial Sequence

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<223> A staphylokinas SAK gene with primer and terminator sequences

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gatggtaaag gaaatgaatt gctatcccct cattatgtcg agtttcctat taaacctgg 180

actacactta caaaagaaaa aattgaatac tatgtcgaat gggcattaga tgcgacagca 240

tataaagagt ttagagtagt tgaatttagat ccaagcgcaa agatcgaagt cacttattat 300

gataagaata agaaaaaaga agaaacgaag tctttcccta taacagaaaa aggtttgtt 360

gtcccgatt tatcagagca tattaaaaac cctggattca acttaattac aaagggtt 420

atagaaaaga aataaaaacaa aatagttgtt tattatgaa agtaatgtct tgattgaata 480

tgtgtagtga aattatcttt catcaaattc tcattcatgc acgaatggtt ctgccccacc 540

taatcagata ttacgtgact tatggggaga aatcagttt gataaaaagtg gaggatccag 600

tagccg 606

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<210> 10
<211> 377
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<213> *Staphylococcus aureus*

<400> 10

Ser Glu Arg Ser Glu Arg Ser Glu Arg Pro His Glu Ala Ser Pro Leu
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Tyr Ser Gly Leu Tyr Leu Tyr Ser Thr His Arg Leu Tyr Ser Leu Tyr
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Ser Gly Leu Tyr Ala Ser Pro Ala Ser Pro Ala Leu Ala Ser Glu Arg
35 40 45

Thr Tyr Arg Pro His Glu Gly Leu Pro Arg Thr His Arg Gly Leu Tyr
50 55 60

Pro Arg Thr Tyr Arg Leu Glu Met Glu Thr Val Ala Leu Ala Ser Asn
65 70 75 80

Val Ala Leu Thr His Arg Gly Leu Tyr Val Ala Leu Ala Ser Pro Gly
85 90 95

Leu Tyr Leu Tyr Ser Gly Leu Tyr Ala Ser Asn Gly Leu Leu Glu Leu
100 105 110

Glu Ser Glu Arg Pro Arg His Ile Ser Thr Tyr Arg Val Ala Leu Gly
115 120 125

Leu Pro His Glu Pro Arg Ile Leu Glu Leu Tyr Ser Pro Arg Gly Leu
130 135 140

Tyr Thr His Arg Thr His Arg Leu Glu Thr His Arg Leu Tyr Ser Gly
145 150 155 160

Leu Leu Tyr Ser Ile Leu Glu Gly Leu Thr Tyr Arg Thr Tyr Arg Val
165 170 175

Ala Leu Gly Leu Thr Arg Pro Ala Leu Ala Leu Glu Ala Ser Pro Ala
180 185 190

Leu Ala Thr His Arg Ala Leu Ala Thr Tyr Arg Leu Tyr Ser Gly Leu
195 200 205

Pro His Glu Ala Arg Gly Val Ala Leu Val Ala Leu Gly Leu Leu Glu
210 215 220

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Ala Leu Ala Pro Arg Ser Glu Arg Ala Leu Ala Leu Tyr Ser Ile Leu
 225 230 235 240

Glu Gly Leu Val Ala Leu Thr His Arg Thr Tyr Arg Thr Tyr Arg Ala
 245 250 255

Ser Pro Leu Tyr Ser Ala Ser Asn Leu Tyr Ser Leu Tyr Ser Gly Leu
 260 265 270

Gly Leu Thr His Arg Thr His Arg Leu Tyr Ser Ser Glu Arg Pro His
 275 280 285

Glu Pro Arg Ile Leu Glu Thr His Arg Gly Leu Leu Tyr Ser Gly Leu
 290 295 300

Tyr Pro His Glu Val Ala Leu Val Ala Leu Pro Arg Ala Ser Pro Leu
 305 310 315 320

Glu Ser Glu Arg Gly Leu His Ile Ser Ile Leu Glu Leu Tyr Ser Ala
 325 330 335

Ser Asn Pro Arg Gly Leu Tyr Pro His Glu Ala Ser Asn Leu Glu Ile
 340 345 350

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<210> 11

<211> 50

<212> DNA

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<223> An oligonucleotide PEC-1 for protein expression cassette

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<210> 12

<211> 55

<212> DNA

<213> Artificial Sequence

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<223> An oligonucleotide PEC-2 for preparing protein expression cassette

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<210> 13
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<211> 50
<212> DNA
<213> Artificial Sequence

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<223> An oligonucleotide PEC-4 for preparing protein expression cassette

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